

A NEW ALOE FROM NORTHERN RHODESIA

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(With Plates XXXI, XXXII.)

Aloe veseyi Reynolds. Species nova, affinis *A. confusae* Engler et *A. penduliflorae* Baker, ab *A. confusa* caulibus crassioribus brevioribus, foliis latioribus, floribus brevioribus angustioribus, ab *A. penduliflora* racemis longioribus, multo laxioribus differt.

Planta caulibus et foliis et inflorescentia pendentibus; caulibus 30—40 cm. longis, 2 cm. crassis. *Folia* c. 12, rosulata, 40—50 cm. longa, basi 3 cm. lata, sensim attenuata, falcato-decurva, pendens; *supra* planiuscula vel leviter canaliculata, maculata; *subtus* convexa, maculata; marginibus dentibus cartilagineis 1—2 mm. longis, usque 20 mm. distantibus armata.

Inflorescentia pendens, 2—4-ramosa, c. 60 cm. longa. *Racemi* arcuato-adscendentes, conici, laxi, usque 12 cm. longi, 7 cm. diam. *Bractee* angustae, lanceolatae, 6 mm. longae, 3 mm. latae, scariosae, albidae, 3-nervatae. *Pedicelli* 14 mm. longi. *Perianthium* luteum, anguste cylindrico-trigonum, 25 mm. longum; *segmenta exteriora* per 5—6 mm. libera; *interiora* latiora. *Antherae* 3—4 mm. exsertae. *Stigma* demum 4—5 mm. exserta. *Ovarium* viridulum, 4 mm. longum, 2 mm. diametro.

HABITAT: Northern Rhodesia: On precipice faces at Kalambo Falls, 22 miles north of Abercorn, cult. Johannesburg, fl. 29 March 1959, Reynolds 8659 holotype (PRE), isotype (K, SRGH).

Our new species is named after Mr. L. D. E. F. Vesey-FitzGerald (Principal Scientific Officer, International Red Locust Control Services, Abercorn, Northern Rhodesia), who discovered plants in July 1939 at Kalambo Falls, 22 miles north of Abercorn.

In August 1954 I visited Kalambo Falls but was unable to secure plants. In July 1958, when Dr. N. R. Smuts and I visited Kalambo, we were fortunately able to get two large plants which have grown well in Bryanston, Johannesburg, where they flowered in March—April, 1959.

A. veseyi grows on both sides of Kalambo Falls (703 ft.), the largest number being found on the southern side, facing west on a perpendicular rock face about half a mile broad and 400—500 ft. deep—impossible to each without block and tackle.

Plants cling to this precipice face, with their stems hanging downwards. The leaves are falcately decurved with their apices pointing downwards, while the slender 3—4-branched inflorescence is also pendent with only the racemes upturned.

A. veseyi appears to be nearest allied to *A. confusa* Engler which occurs at Lake Chala, a water-filled crater on the Tanganyika-Kenya border 7 miles north of Taveta. *A. veseyi* differs from *A. confusa* chiefly in having much shorter thicker pendent stems, broader more densely rosulate pendent leaves, and shorter narrower flowers. Another noteworthy difference is that the leaf sap of *A. confusa* is deep purple and stains clothing, while in *A. veseyi* it is yellowish orange.

Another species to be considered is *A. penduliflora* Baker, sent by Sir John Kirk to Kew from Zanzibar in 1884, and described when it flowered in Kew in August 1888. The precise locality of origin of this species is unknown, and there are (it seems) no published figures. According to description, *A. penduliflora* is a near ally in leaf characters, bracts, pedicels and hanging inflorescence with upturned racemes, but differs in having a much more densely flowered raceme that is only 5 cm. long. Berger states that when he saw the plant in Kew in Sept. 1905, it had a stem 2—3 m. high and 3—4 cm. diam.

Judging from the name, *A. pendens* Forsk. from the Yemen seemed a possible affinity, but the figure in *Bot. Mag. t. 7837* (1902) depicts a plant in all ways distinct from *A. veseyi*.

DESCRIPTION: *Plant* with stems, leaves and inflorescence all hanging downwards on precipice faces.

Stem about 30—40 cm. long, 2 cm. thick, with offshoots from base forming 5 or more rosettes of leaves per plant.

Leaves about 12, rosulate, 40—50 cm. long, 3 cm. broad at base, gradually narrowing to a long-pointed apex, all falcately decurved and pointing downwards; *upper surface* dull grey-green with reddish tinge, flat to slightly canaliculate with numerous spots throughout, the spots dull white, lenticular to narrowly elliptical; *lower surface* rounded, similar to upper surface; *margins* armed with firm cartilaginous deltoid teeth 1—2 mm. long, up to 20 mm. apart, larger near base, gradually smaller to obsolescent upwards.

Inflorescence a slender 2—4-branched panicle about 60 cm. long, pendent, with only the racemes arcuate-ascending.

Peduncle slender, basally flattened and 6 mm. broad, 2—4-branched from about the middle, the branches arcuate-spreading slightly downwards, with the racemes arcuate-ascending, lowest branch subtended at



PLATE XXXI. *Aloe veseyi* Reynolds.

Plants from Kalambo Falls, Abercorn District, Northern Rhodesia, cult. Bryanston.
Johannesburg. Fl. 29 March, 1959, $\times 1/8$ approx.



FIG. 1.



FIG. 2.

PLATE XXXII. *A. veseyi* Reynolds.

FIG. 1.—Pendent inflorescence, $\times 1/8$ approx.

FIG. 2.—Flowers 1/1, from bud to post-pollination stage.

base by a thin, scarious, 3—5-nerved bract which is long-pointed, 15 mm. long, 6 mm. broad at base.

Racemes cylindric-conical, rather laxly flowered, the terminal 12 cm. long, 7 cm. diam., about 30-flowered, the lateral a little shorter, the buds and flowers nutant.

Bracts narrowly lanceolate, long-pointed, 6 mm. long, 3 mm. broad, thin, scarious, white, 3-nerved.

Pedicels 14 mm. long, spreading horizontally to curved slightly downwards.

Perianth narrowly cylindric-trigonus, 25 mm. long, pale yellow, obtuse at base, 5 mm. diam. and greenish yellow across the ovary, thence slightly trigonus and enlarging to the throat with the mouth wide open and 10 mm. across; *outer segments* free for 5—6 mm., with 3 orange nerves, the apices orange-brown tipped, spreading to recurved; *inner segments* themselves free but dorsally adnate to the outer for 18 mm., broader than the outer, and with more obtuse, more spreading apices.

Filaments filiform-flattened, white within the perianth, the exserted part lemon, the three inner narrower and lengthening before the three outer with their anthers in turn exserted 3—4 mm. *Stigma* at length exserted 4—5 mm. *Ovary* green, 4 mm. long, 2 mm. diam.

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